

		10	20	30	40
ATCC 21523 NRRL-B11474	MTAITLGGLLLKGIIITLV	MSTHTSSTLPFKKILVANRGEIAVRAFRAALETGAATVAIYP			
ATCC 21523 NRRL-B11474		50	60	70	80
		REDRGSFHRSFASEAVRIGTEGSPVKAYLDIDEIIGAAKKVKADAIYPGYGFLENAQLA			
ATCC 21523 NRRL-B11474		110	120	130	140
		RECAENGITFIGPTPEVLDLTGDKSRAVTAAKKAGLPVLAESTPSKNIDEIVKSAEGQTY			
			150	160	
ATCC 21523 NRRL-B11474		170	180	190	200
		PIFKAVAGGGGRGMRFVASPDELRKLA TEASREAAFGDGAVYVERAVINPQHIEVQI			
			210	220	
ATCC 21523 NRRL-B11474		230	240	250	260
		LGDHTGEVVHLYERDCSLQRRHQKVVEIAPAAQHLDPELRDRICADAVKFCRSIGYQGAG			
			270	280	
ATCC 21523 NRRL-B11474		290	300	310	320
		VEFLVDEKGHNHFIEMNPRIQVEHTVTEEVTEVDLVKAQMRLAAGATLKEGLTQDKIKT			
			330	340	
ATCC 21523 NRRL-B11474		350	360	370	380
		HGAALQCRTTEDPNNGFRPDTGTITAYRSPGGAGVRLDGAAQLGGEITAHFDSMLVKMT			
			390	400	
ATCC 21523 NRRL-B11474		410	420	430	440
		CRGSDFETAVARAQRALAEFTVSGVATNIGFLRALLREEDFTSKRIATGFIADHPHLLQA			
			450	460	
ATCC 21523 NRRL-B11474		470	480	490	500
		PPADDEQGRILDYLADVTVNPKPHGVRPKDVAAPIDKLPNIKDLPLPRGSRDRLKQLGPAA			
			510	520	
ATCC 21523 NRRL-B11474		530	540	550	560
		FARDLREQDALAVTDFFRDAHQSLLATRVRSFALKPAAEAVAKLTPELLSVEAWGGATY			
			570	580	
ATCC 21523 NRRL-B11474		590	600	610	620
		DVAMRFLFEDPWDRLLDELREAMPNVNIQMLLRGRNTVGYPYPDSVCRAFKEAASSGVD			
			630	640	
ATCC 21523 NRRL-B11474		650	660	670	680
		IFRIFDALNDVSQMRPAIDAVLETNTAVAEVAMAYSGDLSDPNEKLYTLDYYLKMAEEIV			
			690	700	
ATCC 21523 NRRL-B11474		710	720	730	740
		KSGAHILAIKDMAGLLRPAAVTKLVTALRREFDLPVHVHTHDTAGGQLATYFAAAQAGAD			
			750	760	
ATCC 21523 NRRL-B11474		770	780	790	800
		AVDGASAPLSGTTSQPSLSAIVAAFHTRRDGTGLSLEAVSDLEPYWEAVRGLYLPFESGT			
			810	820	

FIG. 2A

ATCC 21523 830 840 850 860 870 880
NRRL-B11474 PGPTGRVYRHEIPGGQLSNLRAQATALGLADRFELIEDNYAAVNEMLGRPTKVTPSSKVV

ATCC 21523 890 900 910 920 930 940
NRRL-B11474 GDLALHLVGAGVDPADFAADPQKYDIPDSVIAFLRGELGNPPGGWPEPLRTRALEGGRSEG

ATCC 21523 950 960 970 980 990 1000
NRRL-B11474 KAPLTEVPPEEQAHLDADDSKERRNSLNRLFPKPTEEFLEHRRRGNTSALDDREFFYG

ATCC 21523 1010 1020 1030 1040 1050 1060
NRRL-B11474 LVEGRETLIRLPDVRTPLLVRLDAILYSEPDDKGMRNVANVNGQIRPMRVRDRSVESVTAT

ATCC 21523 1070 1080 1090 1100 1110 1120
NRRL-B11474 AEKADSSNKGHVAAPFAGVVTVTVAEGDEVKAGDAVIITEAMKMEATITASVDGKIDRVV
E

ATCC 21523 1130 1140
NRRL-B11474 VPAATKVEGGDLIVVVS

FIG. 2B